

## Algo SIP Endpoints and Zoom Phone Interoperability Testing and Configuration Steps

Need Help?

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## Introduction

Algo SIP Endpoints can register to Zoom Phone as a third-party SIP Endpoint and provide Paging, Ringing as well as Emergency Alerting capability.

This document provides instructions to add your Algo device to the Zoom web portal. Interoperability testing results are also available.

All testing has been conducted with the Algo 8301 Paging Adapter and Scheduler, 8186 SIP Horn, and 8201 SIP PoE Intercom. These are representative of all Algo SIP speakers, paging adapters and doorphones and similar registration steps would apply. Exceptions are the 8028 SIP Doorphone and 8128 Strobe Light. Please contact Algo Support to inquire.

***Please note only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.***

## Configuration Steps – Zoom Web Portal

To register an Algo SIP Endpoint to Zoom Phone begin by creating a new common area phone in the Zoom web portal. See the [Zoom support site](#) for more information.

1. Sign in to the Zoom web portal.
2. Click **Phone System Management** > [Users & Rooms](#).
3. Click the [Common Area Phones](#) tab.
4. Click **Add** and enter the following information:

The screenshot shows the 'Add Common Area Phone' dialog box in the Zoom web portal. The dialog box is white with a light gray border and contains the following fields:

- Display Name:** Algo 8180(G2)
- Description (Optional):** (Empty)
- Extension Number:** 804
- MAC Address:** 00:22:ee:12:00:25
- Device Type:** Other (selected from a dropdown menu)

At the bottom right of the dialog box, there are 'Cancel' and 'Save' buttons. The background shows the Zoom web portal interface with the 'Users & Rooms' tab selected under 'Phone System Management'.

- **Site** (only visible if you have [multiple sites](#)): Select the site you want the device to belong to.
- **Display Name:** Enter a display name to identify the device.
- **Description (Optional):** Enter a description to help you identify the location of the device.
- **Extension Number:** Enter an extension number to assign it to the device.
- **MAC Address:** Enter the 12-digit MAC address of the Algo Endpoint. The MAC can be found on the product label or in the Algo Web Interface under **Status**.
- **Device Type:** Select **Other**.  
**Note:** If you don't have the **Other** option, contact your Zoom sales representative. By default, support for a generic SIP profile is not enabled.

- **Emergency Address** (only visible if you don't have multiple sites): Select an [emergency address](#) to assign to the desk phone. If you selected a site for the common area phone, the site's emergency address will be applied to the phone.
5. Click **Save**.
  6. Click **Provision** to view the SIP credentials. You will need this information to complete provisioning using the Algo Web Interface.

### Provisioning

MAC Address	00-22-ee-12-00-25
Device Type	Other

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You will need to enable TLS1.2 for SIP registration and enable SRTP for secure calling on your IP phone. Please refer to your manufacturer's instructions for these processes.

**You'll need following information for manual provisioning.**

1. **SIP Domain:** 50744587.zoom.us
2. **Outbound Proxy:** us01sipsj06.zoom.us:5091
3. **User Name:**
4. **Authorization ID:**
5. **Password:**

**Also, download CA [certificate](#) and import to trust list on your IP phone.**

**Note:** Please note that Zoom support team will not be able to troubleshoot or configure IP phones that are provisioned in this manner. Some Zoom Phone features may not work on manually provisioned phones. It may vary depending on your desk phone model.

[Close](#)

## Configuration Steps – Algo Endpoint

To register an Algo SIP Endpoint navigate to the Web Configuration Interface.

1. Open a web browser.
2. Type the IP Address of the endpoint. If you don't know the address yet, navigate to [www.algosolutions.com](http://www.algosolutions.com), find the user guide for your product and go through the Getting Started section.
3. Log in and go to **Basic Settings** -> **SIP** tab.
4. Enter the information provided from Zoom as per below:
  - SIP Domain (Proxy Server) – Zoom SIP Domain
  - Page or Ring Extension – Zoom User Name
  - Authentication ID – Zoom Authorization ID
  - Authentication Password – Zoom Password

The screenshot shows the 'SIP Settings' configuration page. The 'SIP Domain (Proxy Server)' field contains '50744587.zoom.us'. The 'Ring/Alert Mode' is set to 'None'. The 'Page Extension' field contains '215234142890'. The 'Authentication ID' field contains '768005571266'. The 'Authentication Password' field is masked with dots. The 'Display Name (Optional)' field is empty. A 'Save' button is located at the bottom right of the form.

5. Go to **Advanced Settings** -> **Advanced SIP**.
6. Set the **SIP Transportation** protocol to "TLS".
7. Enter the **Outbound Proxy** provided by Zoom.

**Advanced SIP Settings**

**General**

SIP Transportation: **TLS**

*Select Auto to check DNS NAPTR record, then try UDP/TCP.*

*In TLS mode, if the SIP Server requires endpoints to be authenticated, a PEM file containing both a device certificate and a private key needs to be installed on the Algo device. Use the "Advanced Settings > File Manager" tab to upload a certificate file renamed to 'sipclient.pem' in the 'certs' folder.*

*To force the Algo device to authenticate the SIP server, a certificate obtained from the SIP server needs to be installed. Use the "Advanced Settings > File Manager" tab to upload a certificate file renamed to 'siptrusted.pem' in the 'certs' folder.*

SIPS Scheme:  Enabled  Disabled

SDP SRTP Offer: Disabled

SIP Outbound Support (RFC 5626):  Enabled  Disabled

*Enable this option to support best networking practices according to RFC 5626. This option should generally be enabled if the Algo device is being registered with a hosted server or if TLS is being used for SIP Transportation.*

Outbound Proxy: **us01sipsj03.zoom.us:5091**

Register Period (seconds): 3600

8. Ensure the SIP Registration Status shows "Successful".

**Device Status**

**Welcome to the Algo 8301 Paging Adapter & Scheduler Control Panel**

Setting up your Paging Adapter & Scheduler:

**Step 1: Configure your Paging Adapter & Scheduler**

Log in with the default password and use the Basic Settings pages to set up the basic information.

**Step 2: Check network settings (Optional)**

Use the Network page under the Advanced Settings tab to change network settings. The default setting for the device is to obtain its IP address from a DHCP server. Contact your Network System administrator if you plan to assign a static IP address, Mask, and Gateway to the device.

**Step 3: Secure your Paging Adapter & Scheduler (Optional)**

Use the Admin page under the Advanced Settings tab to change the administrator password.  
 ⚠️ Changing the password is extremely important if the device is directly connected to a public network.

**Step 4: Register your Paging Adapter & Scheduler (Optional)**

Please register your product using the link below:  
<http://www.algosolutions.com/register>

Registration ensures your access to the latest upgrades to this product and important service notices.

**Status**

Device Name	pagingadapter		
SIP Registration	Page	Successful	(Extension 215234142890)
Call Status	Idle		
Proxy Status	Single proxy mode		
Security	TLS	Enabled	
	SRTP	Disabled	
Provisioning Status	None Found		



*Note: if registering additional extensions for ringing, paging or emergency alerting, enter the unique credentials for the respective extension in the same way.*

*Only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.*



## Interoperability Testing

### Register to Zoom Phone

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 1.7.6
- Description: Verify 3<sup>rd</sup> Party SIP Endpoints are registered successfully.
- Result: **Successful**

### Register Multiple SIP Extensions Simultaneously

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 1.7.6
- Description: Verify the server will sustain multiple simultaneous extensions registered to the same endpoint (e.g. page, ring, and emergency alert).
- Result: **Not supported at this time. Please see note below.**

*Please note only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.*

### One-Way Page

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 1.7.6
- Description: Verify one-way page mode functionality, by calling the registered page extension.
- Result: **Successful**

### Two-Way Page

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 1.7.6
- Description: Verify two-way page mode functionality, by calling the registered page extension.
- Result: **Successful**

## Ringling

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 1.7.6
- Description: Verify ringing mode functionality by calling the registered ring extension.
- Result: **Successful**

## Emergency Alerts

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 1.7.6
- Description: Verify emergency alerting functionality by calling the registered extension.
- Result: **Successful**

## Outbound Calls

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 1.7.6
- Description: Verify emergency alerting functionality by calling the registered extension.
- Result: **Successful**

## TLS for SIP Signaling

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 1.7.6
- Description: Verify TLS for SIP Signaling is supported.
- Result: **Successful**

## SDP SRTP Offer

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 1.7.6
- Description: Verify support for SRTP calling using Standard (RTP/SAVP) or optional (RTP/AVP) profile.
- Result: **Successful**

## Troubleshooting

### **SIP Registration Status = “Rejected by Server”**

Meaning: The server received register request from the endpoint and responds with an unauthorized message.

- Ensure the SIP credentials (extension, authentication ID, password) are correct.
- Under Basic Settings -> SIP, click on the blue circular arrows to the right of the Password field. If the Password is not what it should be, the web browser is probably auto filling the password field. If so, any change on a page containing a password could be filled in with an undesired string.

### **SIP Registration Status = “No reply from server”**

Meaning: the device is not able to communicate across the network to the phone server.

- Double check the "SIP Domain (Proxy Server)", under Basic Settings -> SIP tab field is filled out correctly with the address of your server and port number.
- Ensure the firewall (if present) is not blocking the incoming packets from the server.
- Ensure TLS is configured for SIP Transportation Method (Advanced Settings -> Advanced SIP).